REMARKS

Applicant appreciates the Office's review of the present application. In response to the Office Action, the cited references have been reviewed, and the rejections and objections made to the claims by the Examiner have been considered.

In order to place the application in condition for allowance, or alternately in better condition for appeal, claims 1, 3, 5, 7, 9, 11-12, 27, and 31 have been amended, and claims 13-18 and 24-26 have been cancelled without prejudice. Support for any claim amendments is found in the specification, claims, and drawings as originally filed, and no new matter has been added. Applicant believes that the amendment to the abovementioned claims does not require a further substantive examination, and therefore requests entry of this amendment. Reconsideration of the application in light of the above amendments and the following remarks is respectfully requested.

Rejections

Rejection Under 35USC §102

Claims 5-12 and 27-28 have been rejected under 35 USC §102(e), as being anticipated by U.S. patent application publication 2003/0135381 to Mathiesen et al. ("Mathiesen"). Applicants respectfully traverse the rejection and request reconsideration based on the amendment to claims 5, 7, 9, 11, 27, and 31, and features in the claims which are neither disclosed nor suggested in the cited reference.

As to a rejection under §102, "[a]nticipation is established only when a single prior art reference discloses expressly or under the principles of inherence, each and every element of the claimed invention." *RCA Corp. v. Applied Digital Data Systems, Inc., (1984, CAFC) 221 U.S.P.Q. 385.* The standard for lack of novelty, that is for "anticipation," is one of strict identity. To anticipate a claim, a patent or a single prior art reference must contain all of the essential elements of the particular claims. *Schroeder v. Owens-Corning Fiberglass Corp., 514 F.2d 901,*

185 U.S.P.Q. 723 (9th Cir. 1975); and Cool-Fin Elecs. Corp. v. International Elec. Research Corp., 491 F.2d 660, 180 U.S.P.Q. 481 (9th Cir. 1974). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).* The elements must be arranged as required by the claim. *In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).*

The rejection of independent claim 9, and its dependent claims 10-12, is respectfully traversed at least because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims, and in as complete detail as in the claims. In this regard, claim 9 recites:

"9. (Currently amended) An imaging device comprising:
a memory comprising computer-executable instructions for distributing metrics information corresponding to imaging operations;
a processor that is operatively coupled to the memory, the processor being configured to fetch and execute the computer-executable instructions from the memory, the computer-executable instructions comprising instructions for:
receiving, by the imaging device, a command to perform an imaging operation;
performing, by the imaging device, the imaging operation; and
responsive to performing the imaging operation, communicating, by the imaging device, metrics information corresponding to the imaging operation to a second device for access by an application on a third device, such that the application on the third device can access the metrics information without forwarding any request for the metrics information to the imaging device."
(emphasis added)

The Mathiesen reference discloses "an on-site printing system that is remotely monitored by a monitoring server operated by a service provider to track conditions of the on-site printing system. The printing system is maintained and serviced automatically by the service provider based on the conditions monitored by the monitoring server" (para. [0002]).

In the present invention, the imaging device performs an imaging operation such as forming an image onto print media. In the Mathiesen reference, printer 140,142 corresponds to the imaging device. Significantly, however, the Mathiesen reference says nothing about the imaging device (i.e. printer 140,142), responsive to performing the imaging operation,

communicating metrics information about the imaging operation to a second device for access by an application on a third device without the third device forwarding any request for the metrics information to the imaging device, as is recited in claim 9. With regard to metrics information, the Mathiesen reference discloses that:

"The server computer 130 also has a connection to the remote monitoring server 150. ... The server computer 130 preferably executes customized software provided by a service provider or lessor to assist the remote monitoring server 150 to monitor the server computer 130 and/or the at least one printer 140, 142. The remote monitoring server 150 may monitor a number of conditions remotely, including the operation and status of the server computer 130, the operation and status of the printer(s) 140, 142, the ink levels of each ink cartridge (or the toner levels in each toner cartridge) in each printer 140, 142, the contents (full, empty, type of media, size, etc.) of a print media tray(s) of each printer 140, 142, and the number of print media units printed by each printer 140, 142." (para. [0016])

While the Mathiesen reference discloses that the remote monitoring server 150 may monitor metrics information, the reference is silent as to how such metrics information is obtained from printers 140,142. There is no disclosure that a printer communicates metrics information to any device responsive to performing the imaging operation. In order for the communicating of metrics information to be responsive to performing the imaging operation, the metrics information would have to be communicated without the metrics information being solicited or requested by another device (i.e. by server computer 130 or remote monitoring server 150). Given the silence of the Mathiesen reference in this regard, it is reasonable to assume that when remote monitoring server 150 requests the operation or status of a printer (apparently via the server computer 130, since no direct communications link from remote monitoring server 150 to printers 140,142 is shown in Fig. 1 or disclosed in the specification), the server computer 130 may forward the request to the printer. Such operation would not satisfy the limitation of claim 9 that the application on the third device can access the metrics information without forwarding any request for the metrics information to the imaging device. Alternatively, the server computer 130 may periodically request the operation or status information from the printer. However, in such a situation the metrics information would still not be sent responsive to performing an

imaging operation (e.g. unsolicited) as recited in claim 9, but rather responsive to the request from the server computer 130. Since the Mathiesen reference does not disclose the features recited in claim 9, it is only through hindsight in light of Applicant's teachings that such features may be found.

Accordingly, the novel features of the present invention are not anticipated by the Mathiesen reference in that at least one essential element, recited in as complete detail as in the claim, is absent from the Mathiesen reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Independent claim 5 (currently amended) recites limitations similar to those of claim 9, discussed above, and was rejected on the same basis as claim 9. Therefore, for similar reasons as explained heretofore with regard to claim 9, the novel features of the present invention are not anticipated by the Mathiesen reference in that at least one essential element is absent from the reference. Therefore, the rejection of independent claim 5, and its dependent claims 6-8 and 28, is improper at least for that reason and should be withdrawn.

The rejection of independent claim 27 is respectfully traversed at least because the single cited reference does not disclose all of the essential elements of the claims arranged as required by the claims and in as complete detail as in the claims. In this regard, claim 27 recites:

"27. (Currently amended) In a distributed computing environment, a method for providing real-time imaging metrics information, the method comprising:
    receiving, at a server device, imaging metrics corresponding to an imaging operation, the imaging operation having been performed by an imaging device; and
    responsive to receiving the imaging metrics, automatically communicating the at least a portion of the imaging metrics to an order processing utility, wherein the order processing utility is located at other than the imaging device and the server device." (emphasis added)

The Office states that Mathiesen "does not disclose that the order processing utility is located at a place other than the imaging device and the server device, but it is inherent that it would be located separate from the remote processing server, such as on the vendor's device, so

that the server is able to place an order and have it shipped to the end user (See Page 2, Paragraph 0021)" (Final Office Action, p.6). Applicant respectfully disagrees. Such a configuration is not inherent because it contradicts the disclosure of the Mathiesen reference. The Mathiesen reference discloses:

"The <u>remote monitoring server 150</u> may be adapted … <u>to maintain and charge an account of the end user </u>for the units of media printed by the at least one printer 140, 142 (e.g., the number of sheets printed for a particular sized print media)." (para. [0017])

The Mathiesen reference further discloses:

"[I]f the <u>remote monitoring server 150</u> detects that the ink level in an ink cartridge of one of the printers 140, 142 is getting low, then <u>it</u> may compare the data in the enduser's order profile to determine when an order for a replacement ink cartridge for the printer 140, 142 is due. … The order may be automatically placed and shipped to the end user just before the ink cartridge is exhausted." (para. [0021])

Applicant thus believes that the Mathiesen reference clearly teaches that the order processing utility is located <u>at</u> the server device.

Accordingly, the novel features of the present invention are not anticipated by the Mathiesen reference in that at least one essential element, recited in as complete detail as in the claim, is absent from the Mathiesen reference. Therefore, the rejection is improper at least for that reason and should be withdrawn.

<u>Rejection Under 35USC §103</u>

Claims 1-4, 19-23, and 29 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent application publication 2003/0135381 to Mathiesen et al. ("Mathiesen") in view of U.S. patent 5,802,420 to Garr et al. ("Garr"). Applicants respectfully traverse the rejection and request reconsideration.

As to a rejection under §103(a), the U.S. Patent and Trademark Office ("USPTO") has the burden under §103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that

would lead that individual to the claimed invention. *See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988)*. The Manual of Patent Examining Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

The rejection of independent claim 1, and its dependent claims 2-4 and 23, is respectfully traversed for at least the following reasons. Claim 1 recites:

> "1. (Currently amended) In a distributed computing environment, a method for distributing peripheral device operational metrics information, the method comprising:
> receiving, by an imaging device, a command to perform an imaging operation;
> responsive to receiving the command, performing, by the imaging device, the imaging operation; and
> <u>responsive to performing the imaging operation, communicating, by the imaging device, metrics information corresponding to the imaging operation to a second device</u>;
> receiving, at the second device, a request from a third device to access the metrics information; and
> responsive to receiving the request, providing access to the metrics information to the third device without the third device communicating with the imaging device." (emphasis added)

The Office has not established a *prima facie* case of obviousness at least because the applied references do not teach or suggest all of Applicant's claim limitations.

The Office states, with regard to the Mathiesen reference, that

> "Once the imaging operation is completed, the metrics information is communicated to a second device (remote monitoring server, See Figure 1, Element 150) and then forwarded to a third device without communication with the first device (forwarding the information to a device that includes either order processing, See Page 2, Paragraph 0021 or a billing account, See Page

2, Paragraph 0017, without communicating with a first device since the remote monitoring server provides the communication)" (Final Office Action, p.8).

However, for similar reasons as explained heretofore with regard to claim 9, Applicant respectfully believes that the Mathiesen reference does not teach or suggest that the imaging device communicates metrics information to the second device responsive to performing the imaging operation.

Furthermore, also for similar reasons as explained heretofore with regard to claim 27, Applicant respectfully believes that the Mathiesen reference does not teach or suggest any third device; instead, the Mathiesen reference discloses that order processing and billing are performed on the remote monitoring server (i.e. the second device).

Also with regard to the Mathiesen reference, the Office states that the reference "does not disclose the second device receiving a request from a third device to access the metrics information" (Final Office Action, p.8). Instead, the Office states that the Garr reference "discloses a third device (host computer) that requests to access the metrics information (track the toner gradation changes and total pages printed from the printer, See Col. 17, Line 63-Col. 18, Line 4, so a user is able to view it, See Figure 7)" (Final Office Action, p.8).

The Garr reference discloses a system in which metrics information associated with an imaging device, such as the quantity of toner remaining in a toner cartridge of a printer or a corresponding number of remaining pages, can be displayed on a screen of a second device connected to the imaging device, such as a host computer that is connected to the printer (Abstract; Fig. 7). Furthermore, in the Garr reference, any device accessing the metrics information must communicate with the imaging device. There is no disclosure in the Garr reference that the host computer could obtain access to the metrics information by requesting it from any device other than the imaging device. As with the Mathiesen reference, any teaching or suggestion of a third device is absent from the Garr reference. To find a third device in a combination of these references could be possible only in hindsight and in light of Applicants' teachings.

In addition, the Office has not established a *prima facie* case of obviousness at least because there is no suggestion or motivation to modify the reference or to combine reference teachings. With regard to the motivation for combining the Mathiesen and Garr references, the Office states that "by having a host computer view the metrics information, a user is able to request and view the combined metrics information used on multiple printers ... from the server instead of accessing a single printer to access the metrics information" (Final Office Action, p.8).

However, Applicant believes that the tradeoffs involved in combining the Mathiesen and Garr references, assuming arguendo that such a combination is feasible, are not desirable as a whole. "Trade-offs often concern what is feasible, not what is, on balance, desirable. Motivation to combine requires the latter" *Winner Int'l Royalty Corp. v. Wang, 53 USPQ2d 1580, 1587.* The "gas gauge" application program (Fig. 7) running on the host computer of the Garr reference illustrates the remaining toner for a single printer connected to the host computer. However, it is well known for computers to selectively access more than one printer, whether the printers are connected via a network, or via plural direct connections to the host computer. In order to view the toner status of multiple printers, the application program of Fig. 7 might require modifications not taught or suggested by either of the combined references. Assuming arguendo that these modifications could be made, the same capability must be provided in the application program regardless of whether the host computer is directly connected to multiple printers, or whether the host computer is connected to the remote monitoring server 150 of the Mathiesen reference. However, the tradeoffs that would be involved in using a remote monitoring server as in the Mathiesen reference, instead of direct printer connections, are undesirable on balance. Adding an additional remote monitoring server computer as taught by the Mathiesen reference to the host computer of the Garr reference would require considerable expense and add significant software and network complexity. The same capability could be provided at much lower cost (i.e. completely eliminating the remote monitoring server computer 150) and much more simply merely by directly connecting multiple printers to the host computer of the Garr reference.

Therefore, the tradeoffs involved in combining the Mathiesen and Garr references are not desirable as a whole.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the claimed features of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

The rejection of independent claim 19, and its dependent claims 20-21 and 29, is respectfully traversed for at least the following reasons. Claim 19 recites:

"19. (Previously presented) In a distributed computing environment, a computer-readable medium comprising computer-executable instructions for providing real-time imaging metrics information, the computer-executable instructions comprising instructions for:
  receiving, at a server device, imaging operational metrics corresponding to an imaging operation, the imaging operation having been performed by an imaging device;
  receiving, at the server device, a request from an application program for at least a portion of the imaging operational metrics, the application program executing on another device different from the imaging device and the server device; and
  communicating the at least a portion of the imaging operational metrics from the server device to the application program." (emphasis added)

The Office has not established a *prima facie* case of obviousness at least because the applied references do not teach or suggest all of Applicant's claim limitations.

With regard to the limitation of receiving imaging operational metrics, the Office states that "a server device (remote monitoring server, See Figure 1, Element 150) receiving the imaging operational metrics information corresponding to an imaging operation performed by the imaging device (the server receives, or monitors, the status of the printer, such as the ink level, See Page 2, Paragraph 0016)" (Final Office Action, p.8). However, the metrics are not received at remote monitoring server 150 from the imaging device, but rather from server 130. The Garr reference does not remedy this deficiency in that there is no server taught or suggested in the Garr reference.

In addition, the Office has not established a *prima facie* case of obviousness at least because there is no suggestion or motivation to modify the reference or to combine reference teachings, for similar reasons that have been discussed heretofore with regard to claim 1.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the claimed features of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

The rejection of independent claim 22 is respectfully traversed for at least the following reasons. Claim 22 recites:

"22. (Previously presented) A server comprising:
a memory comprising computer-executable instructions for providing real-time imaging metrics information;
a processor that is operatively coupled to the memory, the processor being configured to fetch and execute the computer-executable instructions from the memory, the computer-executable instructions comprising instructions for:
receiving, at the server, an unsolicited set of imaging operational metrics corresponding to an imaging operation, the imaging operation having been performed by an imaging device;
receiving, at the server, a request from an application program for at least a portion of the imaging operational metrics, the application program executing on another device different from the imaging device and the server; and
communicating the at least a portion of the imaging operational metrics to the application program." (emphasis added)

The Office has not established a *prima facie* case of obviousness at least because the applied references do not teach or suggest all of Applicant's claim limitations. With regard to the limitation of receiving imaging operational metrics, the Office states a similar rationale as for claim 19. For similar reasons as explained heretofore for claim 19, therefore, the Mathiesen and Garr references do not teach or suggest all these limitations.

In addition, the Office has not established a *prima facie* case of obviousness at least because there is no suggestion or motivation to modify the reference or to combine reference

teachings, for similar reasons as have been discussed heretofore with regard to claim 1.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the claimed features of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Claims 30-31 have been rejected under 35 USC §103(a), as being unpatentable over U.S. patent application publication 2003/0135381 to Mathiesen et al. ("Mathiesen") in view of U.S. patent 5,802,420 to Garr et al. ("Garr"), and further in view of the book Microcomputer Interfacing by Harold S. Stone (1983) and the web page article Polling Mode: Interrupts Versus Polling available at http://www.mathworks.com. Applicants respectfully traverse the rejection and request reconsideration.

The rejection of claim 31 (rewritten in independent form including the limitations of its base claim and any intervening claims) is respectfully traversed for at least the following reasons. Claim 31 recites:

"31. (Currently amended) In a distributed computing environment, a method for providing real-time imaging metrics information, the method comprising:
receiving, at a server device, imaging metrics corresponding to an imaging operation, the imaging operation having been performed by an imaging device;
receiving a registration request from the billing utility;
responsive to the registration request, configuring the server device to automatically communicate the at least a portion of the imaging metrics to the billing utility; and
responsive to receiving the imaging metrics, automatically communicating at least a portion of the imaging metrics to the billing utility." (emphasis added)

The Office has not established a *prima facie* case of obviousness at least because the applied references do not teach or suggest all of Applicant's claim limitations.

The Office admits that the Mathiesen reference does not disclose receiving a registration request, but further states that polling, as taught by the Stone reference, is "a way to make

continuous requests for data from another device", and that, "[a]ccording to Mathworks.com, polling for a program, in this instance, is better because it can execute the request at the required sample time rather than in a given base sample time and overload the system" (Final Office Action, p.14). Applicant does not understand the relevance of the Stone and Mathworks.com references in that they do not teach a limitation of receiving a registration request. With regard to this limitation, the specification of the present application teaches that:

"application registration table 209 includes information to indicate that a requesting application desires to automatically receive image operational metrics corresponding to one or more imaging devices 106 of Fig. 1. The table 209 includes, for example, an application ID and an indication of which of the imaging devices identified by the image device IDs 202 for which the registering application would like to automatically receive imaging operational metrics. The application ID can any type of application ID such as a memory address, an IP address, an intranet address, and so on." (specification, p.10, line 21 – p.11, line 2)

When given their broadest reasonable interpretation consistent with the specification *(See In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000))*, the Stone and Mathworks.com references, alone or in combination with the Mathiesen and Garr references, do not teach or suggest the limitation of receiving a registration request from the billing utility, as recited in claim 31.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the claimed features of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

The rejection of dependent claim 30 is respectfully traversed for at least the following reasons. Claim 30 recites:

"30. (Previously presented) A server as recited in claim 22, wherein the request from the application program is a registration request, and wherein the communicating is performed

automatically without the application program polling or querying the server device." (emphasis added)

Claim 30 is allowable based on its dependence from independent claim 22, whose reasons for allowability over the Mathiesen and Garr references have been discussed heretofore and against which the Stone and Mathworks.com references have not been cited. Claim 30 is additionally allowable for similar reasons as explained heretofore for claim 31, in that it recites a limitation where the request from the application program is a registration request.

Applicants respectfully traverse the Office's assertion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the claimed features of Applicants' invention. Such could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper at least for that reason and should be withdrawn.

Formalities

Claim Objections

Claim 12 has been objected to because of informalities. Claim 12 has been amended in a manner consistent with the suggestions of the Office, and it is therefore believed that this amendment resolves the objection.

Conclusion

Attorney for Applicant(s) has carefully reviewed each one of the cited references made of record and not relied upon, and believes that the claims presently on file in the subject application patentably distinguish thereover, either taken alone or in combination with one another.

Therefore, all claims presently on file in the subject application are in condition for

immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned Robert C. Sismilich, Esq. at the below-listed telephone number.

AUTHORIZATION TO PAY AND PETITION
FOR THE ACCEPTANCE OF ANY NECESSARY FEES

If any charges or fees must be paid in connection with the foregoing communication (including but not limited to the payment of an extension fee or issue fees), or if any overpayment is to be refunded in connection with the above-identified application, any such charges or fees, or any such overpayment, may be respectively paid out of, or into, the Deposit Account No. 08-2025 of Hewlett-Packard Company. If any such payment also requires Petition or Extension Request, please construe this authorization to pay as the necessary Petition or Request which is required to accompany the payment.

Respectfully submitted,

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